EXECUTIVE SUMMARY

AIRCRAFT ACCIDENT INVESTIGATION

E-8C, S/N 96-0043

ROBINS AIR FORCE BASE, GEORGIA

29 AUGUST 2000

On 29 August 2000, at 11:33 a.m. Eastern Standard Time, an E-8C aircraft, S/N 96-0043, sustained \$3,788,079.59 worth of damage to its Joint Surveillance Target Attack Radar System (JSTARS) some 42 nautical miles from Shaw Air Force Base, South Carolina. The E-8C, assigned to the 93^d Air Control Wing, Robins Air Force Base was flying a training mission in which students were being trained in how to operate JSTARS. The pilots were assigned to the 12th Air Command and Control Squadron (ACCS), and the remaining crew personnel were assigned to either the 12 ACCS or the 93^d Training Squadron. Neither the pilots nor anyone else on board the aircraft was injured in the mishap. There were no civilian injuries or property damage.

There is clear and convincing evidence that inadequate hydraulic servicing technical order guidance allowed an over-servicing (overfilling) condition to occur in the hydraulic system, which resulted in excess hydraulic fluid being forced into the radar wave-guide, causing damage to the radar system.

During flight, excess hydraulic fluid in the hydraulic system went unnoticed, and that fluid was forced into the aircraft's bleed air system. This allowed hydraulic fluid to migrate into the radar's wave-guide and to heat up enough to melt the wave-guide.

There is also substantial evidence that the hydraulic quantity gauge contributed to the mishap because it only indicates fluid levels up to 6.0 gallons. The maximum capacity of the utility hydraulic reservoir exceeds this level. Thus, the gauge does not inform ground or flight personnel of an over-serviced condition.

Under 10 U.S.C. 2254(d), any opinion of the accident investigators as to the cause of, or the factors contributing to, the accident set forth in the accident investigation report may not be considered as evidence in any civil or criminal proceeding arising from an aircraft accident, nor may such information be considered an admission of liability by the United States or by any person referred to in those conclusions or statements.